	Application No.	Applicant(s)	
AL (* CAH J. 11)	10/653,652	BEER, PETER	
Notice of Allowability	Examiner	Art Unit	
	Gene N. Auduong	2827	
The MAILING DATE of this communication app. All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT FOR the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in i) or other appropriate communers. This application is su	this application. If not included nication will be mailed in due course. THIS	ve
1. This communication is responsive to <u>application filed Sep</u>	tember 2, 2003.		
2. The allowed claim(s) is/are <u>1-9</u> .			
3. $\boxtimes$ The drawings filed on <u>02 September 2003</u> are accepted by	by the Examiner.		
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority to a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have 2.  Certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents all International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	re been received. re been received in Application	No	
Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements	
5. A SUBSTITUTE OATH OR DECLARATION must be subinformal patent application (PTO-152) which gi			
6. CORRECTED DRAWINGS ( as "replacement sheets") mu  (a) including changes required by the Notice of Draftspe  1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examine Paper No./Mail Date  Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	rson's Patent Drawing Review   r's Amendment / Comment or  1.84(c)) should be written on the the header according to 37 CFI	in the Office action of e drawings in the front (not the back) of R 1.121(d).	
7. DEPOSIT OF and/or INFORMATION about the dep attached Examiner's comment regarding REQUIREMENT.	OSIT OF BIOLOGICAL MATE I FOR THE DEPOSIT OF BIO	RIAL must be submitted. Note the LOGICAL MATERIAL.	-
Attachment(s)		ormal Datast Application (DTO 452)	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>		ormal Patent Application (PTO-152) mmary (PTO-413),	
	Paper No./I	Mail Date	
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB Paper No./Mail Date <u>09-02-2003</u></li> </ol>	/∪o), /. ∐ Examiners /	Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit		Statement of Reasons for Allowance	
of Biological Material	9.	$\mathcal{Q}$	
		Gene N Auduong Primary Examiner Art Unit 2827	

Application/Control Number: 10/653,652

Art Unit: 2827

## **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on September 2, 2003 is being considered by the examiner.

## Allowable Subject Matter

- 3. Claims 1-9 are allowed.
- 4. The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly disclose a read-out circuit for a memory device as claimed, comprising: an interchanging circuit connected to each of the bit lines of one of the bit line pairs and having a first data output line, a second data output line adjacent the first data output line, a third data output line adjacent the second output line, and a fourth data output line adjacent the third output line; the interchanging circuit being configured to apply the bit lines connected to the storage capacitors to the second and third data output lines by activating the word line and to apply the bit lines not connected to the memory cells to the first and fourth data output lines; a first sense amplifier connected to the first and second data output lines; a second sense amplifier connected to the third and fourth data output lines; and a third sense amplifier connected to the second and third data output lines; the first, second, and third sense amplifiers each being configured to amplify a potential difference on the respective two connected lines.

Application/Control Number: 10/653,652 Page 3

Art Unit: 2827

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene N. Auduong whose telephone number is (571) 272-1773. The examiner can normally be reached on 9-5-4, alternate second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on (571) 272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA February 28, 2005

> Gene N Auduong Primary Examiner Art Unit 2827